### भारतीय मानक Indian Standard

# चित्रण एवं चित्रित शोधन के सुधार — प्रतीक और अंकन

IS 7140: 2023

(पहला पुनरीक्षण)

# Correction Illustration and Illustration Proofs — Symbols and Notations

(First Revision)

ICS 37.100.99

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#### **FOREWORD**

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Publication & Graphic Technology Sectional Committee had been approved by the Management and Systems Division Council.

Illustrations form an important part of a publication and contribute to its usefulness as well as aesthetic value. In technical works, illustrations help to elucidate the text and show details that are difficult to describe in words. They may bring out functional relationships between variables or make it possible to compare at a glance different sets of observations. Their function is to capture the reader's attention.

Illustrations employed commonly in publications are of two types, line and half-tone, and a combination of both. Illustrations may be in single or multiple colours. A judicious use of colour can greatly enhance the value of illustrations.

Illustrations are costly to produce. To get the best out of them, there- fore, they have to be prepared and reproduced with care. The process requires close collaboration among a number of specialists - the author, the editor, the artist, the draughtsman, the process engraver, and the process technician and the printer. The best results would accrue only when all contributing elements, such as the quality of the original art work, efficiency in engraving and the quality of press work and printing materials, meet the desired requirements. A sound knowledge of the possibilities and limitations of various processes available for the portrayal of a subject, techniques of graphic reproduction, printing methods, qualities of printing materials, etc, is called for to achieve economy and efficiency.

In the preparation of illustrations right from the stage of commissioning the art work to its final reproduction in the printed form, there are a number of stages requiring communication of instructions from authors/editors/print buyers to artists on the one hand to the process engravers and printers on the other. Since a large member of the instructions are repetitive in character, it would save considerable time and energy if they could be indicated with the help of standard notations and symbols developed on lines similar to proof correction symbols for use in the text (*see* IS 1250 : 2021).

The standard symbols would not only avoid the necessity of writing out lengthy notes but would also preclude the possibility of ambiguity and misinterpretation.

Annex A gives recommendations to be followed in the preparation of line illustrations, half-tone and colour work.

The standard was first published in 1971. This revision has been brought out to bring the standard in the latest style and format of the Indian Standard.

The composition of the committee responsible for the formulation of this standard is listed in Annex C.

#### Indian standard

# CORRECTION ILLUSTRATION AND ILLUSTRATION PROOFS — SYMBOLS AND NOTATIONS

(First Revision)

#### 1 SCOPE

- **1.1.** This standard prescribes symbols to be used for proof corrections in line, half-tone and colour work. Corrections to be carried out in the art work are also given. Accepted abbreviations for use in process engraving have also been given.
- **1.1.1** These corrections may be instructions to the artist, photographer or engraver. These are to be used, in the side margin and at the required portion on the transparent overlap or proof where the correction is desired.

#### 2 REFERENCES

The standard listed below contain provisions which, through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below:

IS No. Title

IS 1250: 2021 Proof corrections for printers and authors

IS/ISO 128-2 Technical product documentation (TPD) — General principles of representation: Part 2 Basic conv entions for lines (under development)

#### 3 LINE WORK

- **3.1** Symbols recommended for correction in line work are given in Table 1. All corrections on the art work or overlay should be marked in pencil.
- **3.2** The various symbols for correction in line work are given in Fig. 1 to 4 and Fig. 7. Reduction of scaling in block making and enlargement of scaling in block making are illustrated in Fig. 5 and 6 respectively.

#### 4 HALF-TONE WORK

- **4.1** Symbols recommended for proof correction in half-tone work arc given in Table 2. Symbols given in Table 1 are also applicable in half-tone work.
- **4.2** For correction in half-tone work use of symbols 3, 4, 7 and 9 have been indicated in Fig. 8 to 10.

#### **5 COLOUR WORK**

- **5.1** Symbols recommended for proof correction in colour work are given in Table 3. Symbols given in Table 1 and 2 are also applicable in colour work.
- **5.2** Figure 11 illustrates use of symbol 2 (to improve registration) in colour work.

#### 6 ABBREVIATIONS IN PROCESS ENGRAVING

**6.1** A few abbreviations for use in process engraving are given in Annex B.

#### **Table 1 Symbols for Corrections in Line Work**

(*Clause* 2.1)

Sl No.	Requirement		Marking	_
		On the Design	Λ	In the Side Margin
(1)	(2)	(3)		(4)
		A. Instructions to the Artist		
i)	Add a line	Draw a line through points required to be connected		Shape of the line* with insertion mark
ii)	Extend a line	Draw an ellipse and indicate the point up to which the line is to be extended	— Х	-do-
iii)	Delete	Draw an ellipse around the line	9	_
iv)	Use thicker line	-do-	—	Indicate the thickness of the line required T
v)	Use thinner line	-do-		-do-
vi)	Use a line of different type	-do-		Indicate the type of line required
vii)	Change the contour of the line	Draw ellipses around the affected portions	$\sim$	Indicate the change in contour
viii)	Space out	-do-	#	_
ix)	Rectify discontinuity	-do-		_
x)	Remove ink	-do-		_

<sup>\*</sup>The symbol illustrates the case where a line is required.
†Shall conform to the practice recommended in IS: 696-1972 'Code of practice for general engineering drawings (second revision).

xi)	Shade the area	Draw ellipses around the affected portions		Or indicate shade pattern
xii)	Apply mechanical tints	-do-	2	_
xiii)	Shift to the left	Put the symbol given in the last column around the letters or portions to be shifted		_

#### **Table 1 Symbols for Corrections in Line Work**

(Clause 2.1)

Sl No.	Requirement		Marking	
		On the Design		In the Side Margin
(1)	(2)	(3)		(4)
xiv)	Shift to the right	-do-	Ç	_
xv)	Use capital letters	Insert '≡' under desired letters		_
xvi)	Use small capital letters	Insert '=' under desired letters		_
xvii)	Use lower ease	Encircle letters		_
xviii)	Use smaller size lettering	-do-	$\bigcirc$	Specify the needed point size of type/type face or size in mm followed by the symbol
xix)	Use bigger size lettering	-do-	$\stackrel{\bullet}{\bigoplus}$	Specify the needed point size of type/ type face or size in mm followed by the symbol
	B. INST	TRUCTIONS TO THE EN	GRAVER	
xx)	Reduce the scaling in block making	At the bottom of the design or on the reverse, draw a line to the extremities of the design. In the center of the lime, indicate the exact dimension required in the finished block		<b>-</b> –
xxi)	Enlarge the scaling in block making	-do-	<del>-</del> -	_
xxii)	Add positive tint	Mark the contours of the area and shade in blue pencil	+++	_
xxiii)	Add negative tint	Mark the contours of the area and shade in red pencil		_

Table 1 (Concluded)

Sl No.	Requirement		Marking	
		On the Design		In the Side Margin
(1)	(2)	(3)		(4)
xxiv)	Separate the blocks and mount individually	Demarcate the line where separation is to affected	$\bigcirc$	_
	•	C. PROOF CORRECTIONS	'	
xxv)	Broken line/scratch	Draw an ellipse around the affected portion	×	_
xxvi)	Remove or cut out a portion	Encircle the affected area and mark with crosses	$(\times \times \times)$	_
xxvii)	Heavy impression/more ink required	Draw an ellipse around the affected portion	>	_
xxviii)	Light impression/less ink required	-do-	<	_
xxix)	Pierce the block	Mark the required portion	$(\bot)$	_

#### **Table 2 Symbols for Corrections in Half-Tone Work**

(Clause 3.1)

Sl No.	REQUIREMENT	MARKING		
	On the Design/Proof In the Side Margi			
(1)	(2)	(3)	(4)	
	A. INSTR	UCTIONS TO THE PHOTOGRAP	HER/ARTIST	
i)	Increase contrast/reduce contrast	Encircle portions on over lay which require improvement		
ii)	Delete or mark areas not required	On the overlay, demarcate the portion required to be retained. Put crosses in the areas required to be deleted	×××× ××××	
iii)	B. INST	RUCTIONS TO THE ENGRAVEI	R/PRINTER	
iv)	Broken dot pattern	Encircle the affected area on proof	X	
v)	Increase contrast/reduce contrast	Encircle the affected area on proof		
vi)	Cut out areas	Encircle the affected area and mark with crosses	$\times \times \times$	
vii)	Avoid filing	Encircle the affected area	$\bowtie$	
viii)	Correct wavy edges	-do-	{	
ix)	Open out shaded area / bring out high lights	-do-		
x)	Remove foreign matter from block surface	-do-	9	
xi)	Cut away or increase the depth of any areas on a block not required	-do-	$\bigotimes$	

Table 2 (Concluded)

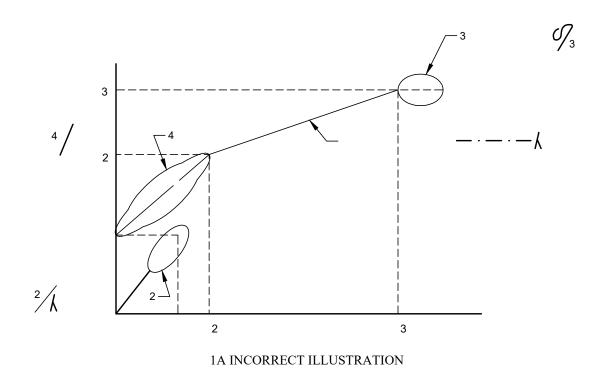
Sl No.	REQUIREMENT	MARKIN	NG .
	On	the Design/Proof	In the Side Margin
(1)	(2)	(3)	(4)
xii)	To remove part of the flange from the block	Indicate the portion(s) to be removed with crosses	×××
xiii)	When bleeding is required	Mark the edge or edges with arrows	
xiv)	When tonal effects are not required area(s) in half-tones	Encircle the required area	

**Table 3 Symbols for Corrections in Colour Work** 

(*Clause* 4.1)

Sl No	o. Requirement	Markin	g
(1)	(2)	On the Proof (3)	In the Side Margin
i)	The original effect has not been achieved	Encircle the concerned portion	
ii)	Improve registration	Encircle the affected area	
iii)	Register edges	Put an ellipse around the affected line	
iv)	Supply progressives in the specified sequence	Give full specification of the sequence required <i>Example:</i> Proof B1+R+Bk+Y	_
v)	Three dimensional effect required	Encircle the required area	3

NOTE — The numbers shown in Fig. 1A, 2A, 3A, 4A and 7A (incorrect illustrations) correspond to the item numbers of Table 1. In actual corrections these item numbers and arrows need not be used.



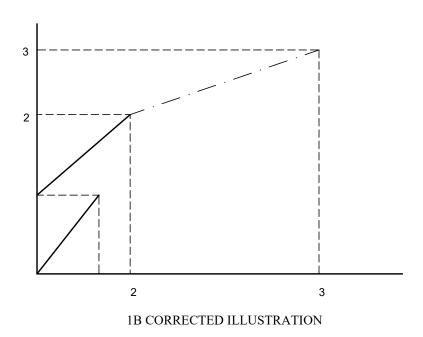
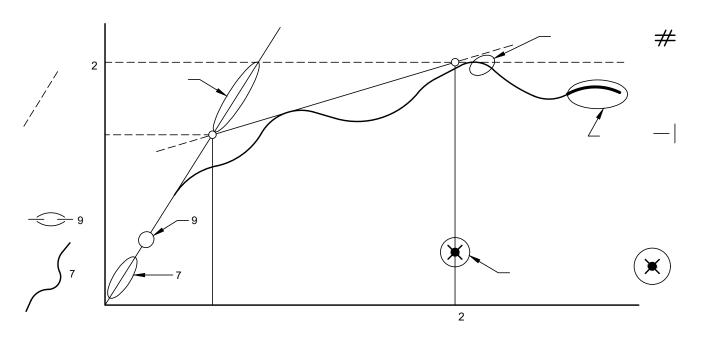
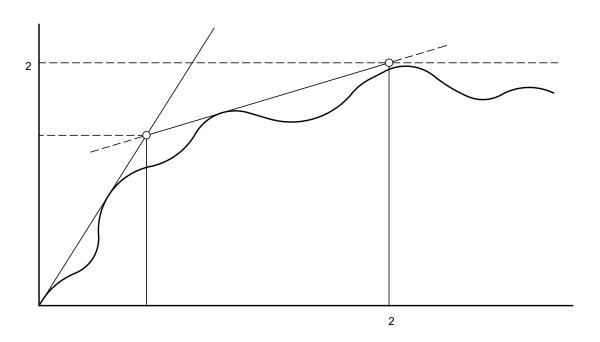


Fig. 1 Symbols 1 to 4 for Correction in Line Work

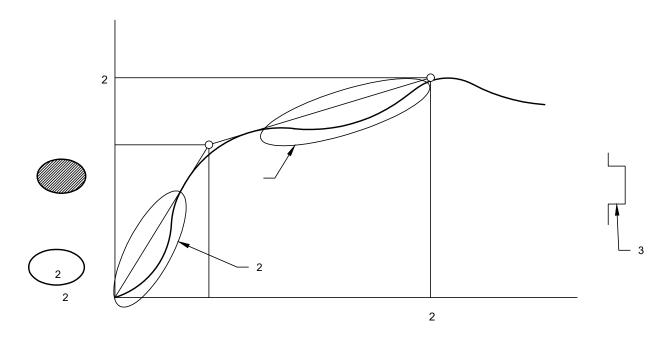


2A INCORRECT ILLUSTRATION



2B CORRECTED ILLUSTRATION

Fig. 2 Symbols 5 to 10 for Correction in Line Work



#### 3A INCORRECT ILLUSTRATION

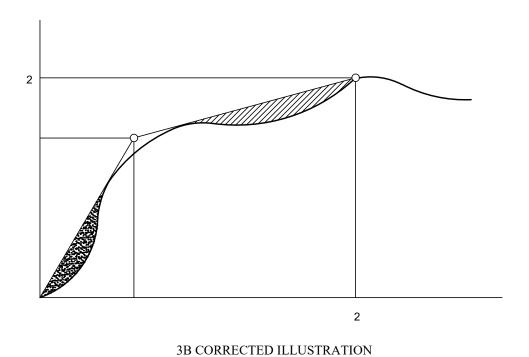
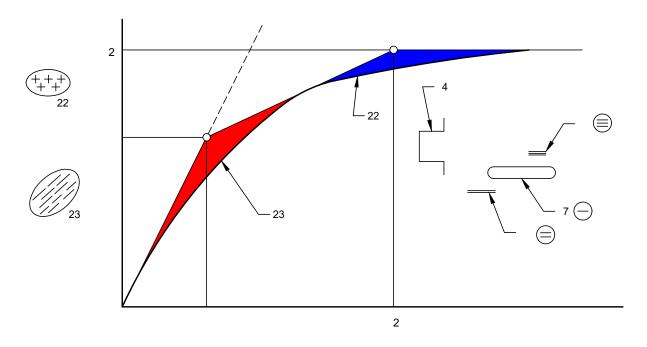
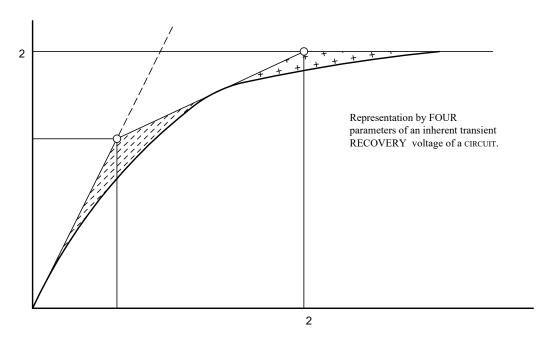


Fig. 3 Symbols 11 to 13 for Correction in Line Work



4A INCORRECT ILLUSTRATION



4B CORRECTED ILLUSTRATION

Fig. 4 Symbols 14 to 17 and 22 and 23  $\,$ 

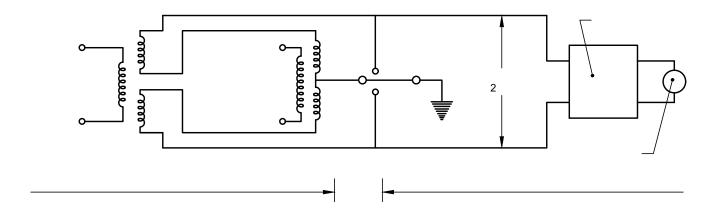


Fig. 5 Method of Indicating Reduction in Block Making

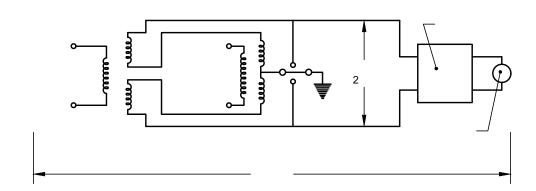
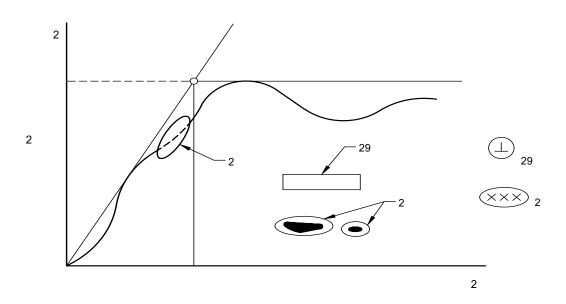
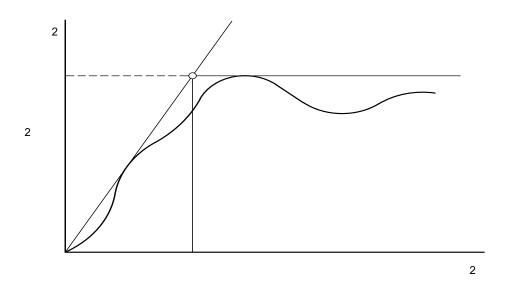


Fig. 6 Method of Indicating Enlargement in Block Making



7A INCORRECT ILLUSTRATION



7B CORRECTED ILLUSTRATION

Fig. 7 Symbols 25, 26 and 29 for Correction in Line Work

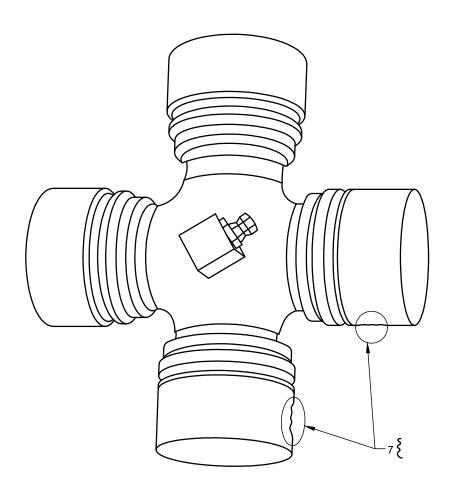


FIG. 8 ILLUSTRATION SHOWING WAVY EDGES ON BLOCK AND SYMBOL 7 FOR CORRECTION

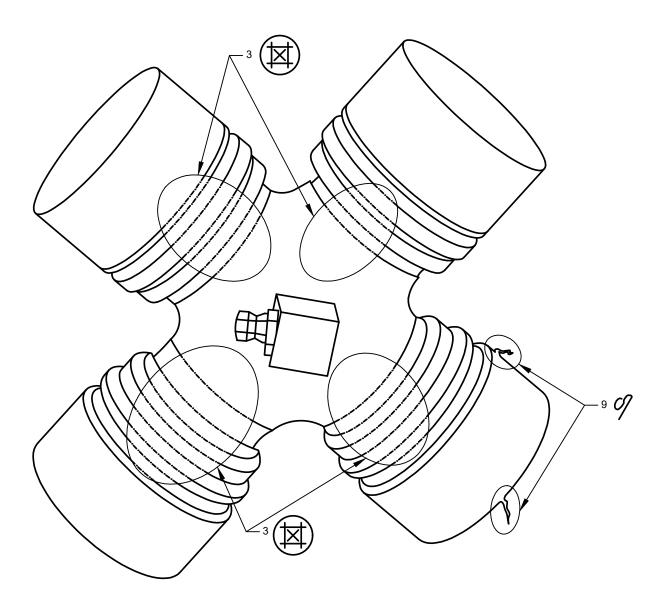


Fig. 9A Illustration Showing Broken Dot Pattern (Symbol 3) and Foreign Matter on Block Surface (Symbol 9)

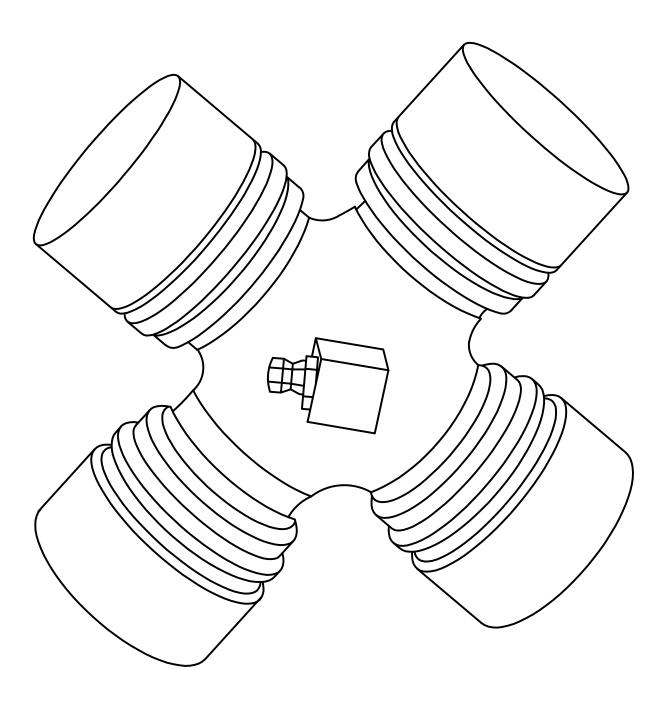


FIG. 9B CORRECTED ILLUSTRATION

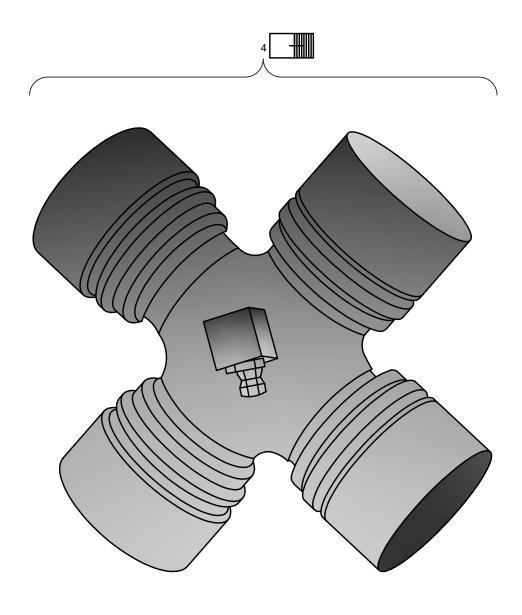


Fig. 10A Illustration Showing too much Contrast. Symbol 4 (to Reduce Contrast) for Correction in Half Tone Work

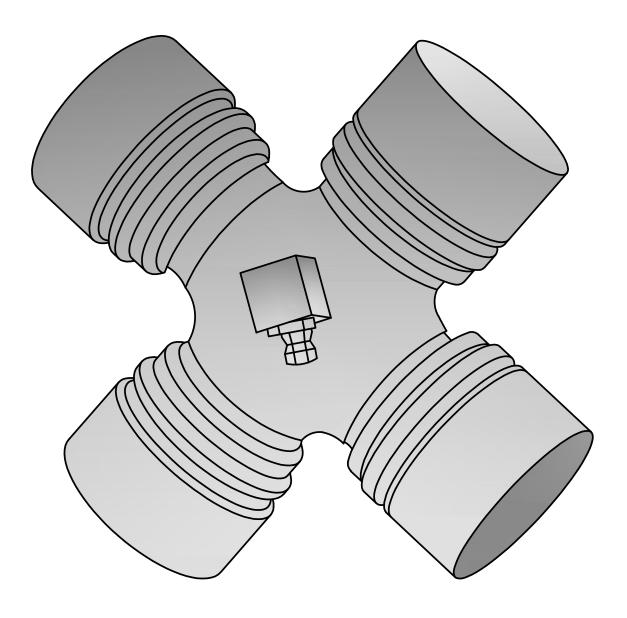


Fig. 10B Illustration Showing Reduced Contrast

NOTE — The number shown in Fig. 11A (faulty registration correponds to the item number of Table3. In actual correction this item number and arrows need not be used.

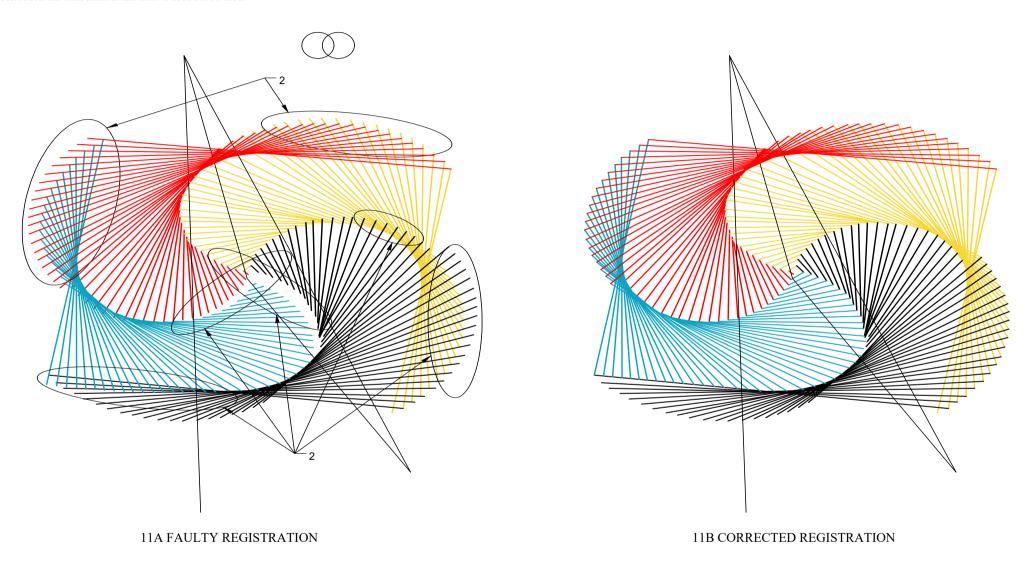


FIG. 11 USE OF SYMBOL 2 FOR CORRECTION OF REGISTRATION

#### ANNEX A

(Foreword)

## RECOMMENDATIONS FOR THE PREPARATION OF LINE/HALF-TONE AND COLOUR ILLUSTRATIONS

#### **A-1 LINE ILLUSTRATIONS**

- **A-1.1** Line originals shall be drawn in Indian ink (a good quality black opaque ink), applied by pen and/or brush to hard board, tracing linen or tracing paper according to the subject or the requirements of the job. Process white shall be used for making corrections. Scraper-board provides an alternate method for preparing line and reverse designs.
- **A-1.2** Authors and editors should indicate their requirements to the artist in clear terms and should explicitly direct attention to features required to be highlighted. Devices, such as mechanical tints or a second colour, may be used to promote clarity. Technical or engineering drawings, shall conform to IS/ISO 128-2.
- **A-1.2.1** The artist shall be instructed on the following points:
  - a) Type of material to be used board, tracing cloth, tracing paper, graph paper, etc:
  - b) Size of drawing including the approximate ratio of length to breadth (including bleeding);
  - c) Size of lettering including style (capitals, small capitals, lower);
  - d) Types and thicknesses of lines for different purposes (*see* Note);
  - e) Areas to be shaded or hatched (with indication of shade pattern or tint No.); and
  - f) Ultimate reduction.

NOTE — The types and the thicknesses of lines for different purposes shall conform to IS/ISO 128-2.

#### **A-1.3 Size**

Illustrations shall be made one and a half times to twice the size required in the final print to increase sharpness. In case a solid ground strip is required, no art worth need be prepared but the dimensions (length and breadth) may be indicated to the engraver.

**A-1.4** The rough or the finished designs received from the artist or the draughtsman should be

examined carefully. It is advisable to show the art work to the author at the rough stage particularly if

it is a perspective drawing constructed from orthographic working drawings or is an "artist's impression" of the equipment or is based on a rough diagram devised by the author. Errors, omissions and misconceptions may enter into art work just as insidiously as into the text.

- **A-1.4.1** The thickness of the lines should commensurate with the degree of reduction required. The lines should not be too closely spaced otherwise there is risk of 'filling up' during printing.
- **A-1.4.2** Areas in solid ink should not surfer from any discontinuities. The portions required to be shaded should be marked out and the type of hatching indicated. In case the shading is through tints, full details of the tint No. required shall be provided. After the tints have been laid, the contour lines drawn to mark out the areas should be removed carefully at the proper time.
- **A-1.4.3** A black drawing on white paper may be reversed by the process engraver and rendered as a white design on a black ground. In this case, the designer should show the contours and limits of the intended black ground with a boundary line for the guidance of the process engraver.

#### A-1.4.4 Annotation

The annotations should be examined to check mistakes of spellings or construction. Proof reading symbols given in IS 1250: 1958\* should be used to indicate corrections.

**A-1.5** The designs shall be handled with care. A design may be easily spoiled through careless handling, trimming, marking, attaching clips, folding, etc. All corrections and instructions should be marked on the overlay only.

#### A-1.6 Instructions to Process Engraver

A process engraver would need instructions regarding the size of the finished block, the material

to be used (zinc, copper, magnesium, brass, ebonite and plastic), portion required to be reversed, portions requiring tints, etc. The instructions to the engraver are given on an overlay of tracing attached to the design. Sometimes, for economy a composite block may be made for a number of illustrations to be separated later on and mounted individually. A process engraver would require guidance on the position where such separations are to be effected. Requirements for duplicate blocks, such as matrixes, stereos, electros (nickel or copper faced), rubber stereos and ebonite, have also to be indicated.

#### A-2 HALF-TONE ILLUSTRATIONS

- **A-2.1** Close consultation between the editor, the author, the photographer, the production specialist and the process engraver shall be kept for planning and selection of photographs.
- **A-2.2** For better results a sharp glossy print shall be used.
- **A-2.3** Photographs shall be handled with care. All instructions should be given on overlay.
- **A-2.4** In addition to instructions indicated for line work, a process engraver would also need in the case of half-tone blocks, information on the screen to be used as well as on any area required to be cut out.
- **A-2.5** The background of a half-tone picture can be cut out to emphasize the important part of the picture or can be vignetted, that is, caused to fade away gradually. An engraver can always provide a tone background to a cut original and in reverse if requires. it is desirable to prepare the art work exactly in the form required.
- **A-2.6** Engraver's pulls should be, as a rule, proofed on the paper to be actually used for the job so that it may provide for the printer a true guide to the reproduction of colour and other details.

#### A-3 LINE COLOUR WORK

#### A-3.1 Key Drawing

In most line colour work, it is desirable to make a black key drawing slowing different colour areas. The intended colour scheme is indicated on an overlay of tracing paper attached to the key drawing. The colour patches for exact shades required are supplied for the guidance of the engraver and printer. Instructions may be given to the engraver for removing the demarcating lines in the finished block after separation of colours when etching.

**A-3.2** The process employed for making multicolour blocks is the same as for other line blocks.

#### A-4 HALF-TONE COLOUR WORK

- **A-4.1** Colour transparencies are most popular for half-tone colour work as they are easy to handle and transmit. To protect them from damage, the transparencies should be mounted in a glass or transparent plastic case.
- **A-4.2** All art work should be mailed flat.
- **A-4.3** While selecting colour transparencies, the following points have to be kept in mind:
  - a) The transparencies to be selected should have colours faithful to the original subject and its moods. Transparencies should have adequate middle tones for good reproduction. High contrast transparencies are not suitable.
  - b) The transparency should be sharp which means that when viewed through a magnifying glass of magnification 8, the details and depth should be crisp. The required subject should stand out in comparison to the supporting elements.
  - c) All the colours in the transparencies should be well balanced and of adequate strength. A small patch requiring more of one colour will be difficult to reproduce if other areas need very little of that colour. Any adjustment of any individual colours lacking in the original transparency is not practicable at the proofing and reproducing stage. It is not easy for the technician 'to add more of red here and reduce blue there at the time of final printing.
  - Transparencies should be examined from the right side, that is, the emulsion side is kept away.
  - e) All persons working with colour transparencies should use transparency viewer with similar standard light source, namely, fluorescent tubes/bulbs.
  - f) The larger the transparency the better it is. At least 6 cm × 6 cm size should be used. The enlargement should not be more than eight times.

g) Duplicate transparencies are not as good as originals for reproduction and should be avoided.

**A-4.4** There are two ways to mark composition and size on colour transparencies. A transparency itself may be marked like a block and white photograph. Alternatively, a positive black and white print may be obtained in any size of which the required instructions may be indicated.

#### **A-4.5 Instructions to Process Engraver**

An engraver would require instructions regarding:

- a) set of block in three or four or more colours:
- b) material to be used;
- c) type of block line, half-tone, line and tone combined and vignette;
- d) screen ruling in half-tone work;
- e) size and bleeding; and
- f) for cutting out any area in a particular colour plate.

#### A-4.6 Proofing

Proofs in colour work are supplied as a set of progressives, such as yellow (Y), red (R), Y + R,

blue (BI), Y + R + BI, black (Bk), Y + R + Bk. Extra progressives of achieved colours like green (Y + BI) and brown (Y + R + Bk) can also be asked for. It is also important that each progressive proof should have colour patches, at least tour, with different densities in all plates. The process engraver should also supply particulars of the inks used for proofing so that the printer could reproduce the same result faithfully. Progressives should be taken on actual paper to be used for final printing. The proof should be checked under fluorescent light or day light.

#### A-5 EXAMINATION

- **A-5.1** Block pulls supplied by the engraver or the machine pulls supplied by the printer should be examined for clarity and sharpness and for defects. Such as broken lines, scratches and fillings. Particular care should be taken to ensure the following.
  - All instructions issued to the engraver have been carried out faithfully; and
  - b) Sizes of the blocks are in accordance with the instructions supplied.
- **A-5.2** All corrections on the proofs should be marked in red ink. In case there are too many corrections, revised proofs should be called for.

#### ANNEX B

(Clause 6.1)

#### ABBREVIATIONS EMPLOYED COMMONLY IN PROCESS ENGRAVING

i)	Angle of screen	
ii)	Black	Bk
iii)	Black and white	B/W
iv)	Blue	BI
v)	Contrast in a photograph	С
vi)	Double enlargement	2/S
vii)	Half size	1/2/S
viii)	Half-tone	H/T
ix)	Highlights	H/L
x)	Matrix	Mat
xi)	Normal in a photograph	N
xii)	One -fourth size	1/4/S
xiii)	Red	R
xiv)	Register	R
xv)	Remainder in proportion	RIP
xvi)	Same size	S/S
xvii)	Subdued photograph	S
xviii)	Yellow	Y

#### ANNEX C

(Foreword)

#### COMMITTEE COMPOSITION

Publication & Graphic Technology, MSD 06

Organization	Representative(s)
Guru Jambheshwar University, Hissar	DR ANJAN KUMAR BARAL (Chairperson)
Authentication Solution Providers Association (ASPA) Former Hologram Manufacturers Association of India, New Delhi	SHRI CHANDER SHEKHAR JEENA SHRI NITYANAND SHENOY (Alternate)
Avantika Printers Private Limited, New Delhi	SHRI MUKTNATH PANDEY
Central Pulp and Paper Research Institute (CPPRI), Saharanpur	SHRI SANJAY TYAGI SHRI R. D. GODIYAL ( <i>Alternate</i> )
Delhi Printers Association, New Delhi	SHRI B. D. MENDIRATTA SHRI SUNIL JAIN (Alternate)
Department of Printing Technology, Anna University, Chennai	PROF N. RAJESWARI
Department of Printing Technology, Jadavpur University, Kolkata	Dr Arpitam Chatterjee
Directorate General of Quality Assurance (DGQA), Bengaluru	Dr N. K. Murthy
Directorate General of Quality Assurance (DGQA), Ministry of Defence, New Delhi	COL M. MURALIDHARAN SHRI JANARDHAN K. (Alternate)
Directorate of Printing, New Delhi	REPRESENTATIVE
Future Schoolz, Kochi	SHRI KULAKKADA PRADEEP SHRI JOSE THOMAS ( <i>Alternate</i> )
Government Institute of Printing Technology, Mumbai	SHRI SAMEER DESHPANDE
Indian Printing Packaging and Allied Machinery Manufacturers Association (IPAMA), Noida	SHRI S. DAYAKAR REDDY SHRI PRASHANT VATS (Alternate I) SHRI NAVEEN GUPTA (Alternate II)
IPP Services, Training and Research Private Limited (IPPSTAR), Noida	SHRI NARESH KHANNA
Joy D - Zign Engineers Private Limited, New Delhi	SHRI N. S. MANKU
Kumar Printers Private Limited Palwal district, Haryana	SHRI SANDEEP BHARGAVA

Organization

Representative(s)

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